

# FGF-2 (A-1): sc-271847

## BACKGROUND

Fibroblast growth factor-1 (FGF-1), also designated acidic FGF, and fibroblast growth factor-2 (FGF-2), also designated basic FGF, are members of a family of growth factors that stimulate proliferation of cells of mesenchymal, epithelial and neuroectodermal origin. Additional members of the FGF family include the oncogenes FGF-3 (Int2) and FGF-4 (hst/Kaposi), FGF-5, FGF-6, FGF-7 (KGF), FGF-8 (AIGF), FGF-9 (GAF) and FGF-10–FGF-23. Members of the FGF family share 30-55% amino acid sequence identity and similar gene structure, and are capable of transforming cultured cells when overexpressed in transfected cells. Cellular receptors for FGFs are members of a second multigene family including four tyrosine kinases, designated Flg (FGFR-1), Bek (FGFR-L), TKF and FGFR-3.

## REFERENCES

- Moore, R., et al. 1986. Sequence, topography and protein coding potential of mouse int-2: a putative oncogene activated by mouse mammary tumor virus. *EMBO J.* 5: 919-924.
- Delli Bovi, P., et al. 1987. An oncogene isolated by transfection of Kaposi's sarcoma DNA encodes a growth factor that is a member of the FGF family. *Cell* 50: 729-737.

## CHROMOSOMAL LOCATION

Genetic locus: FGF2 (human) mapping to 4q27; Fgf2 (mouse) mapping to 3 B.

## SOURCE

FGF-2 (A-1) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 35-67 within an internal region of FGF-2 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

FGF-2 (A-1) is available conjugated to agarose (sc-271847 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-271847 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-271847 PE), fluorescein (sc-271847 FITC), Alexa Fluor® 488 (sc-271847 AF488), Alexa Fluor® 546 (sc-271847 AF546), Alexa Fluor® 594 (sc-271847 AF594) or Alexa Fluor® 647 (sc-271847 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-271847 AF680) or Alexa Fluor® 790 (sc-271847 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-271847 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

FGF-2 (A-1) is recommended for detection of precursor and mature FGF-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

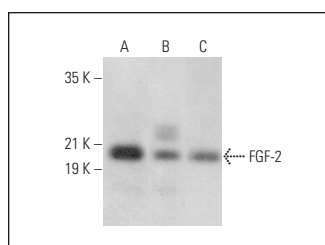
FGF-2 (A-1) is also recommended for detection of precursor and mature FGF-2 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for FGF-2 siRNA (h): sc-39446, FGF-2 siRNA (m): sc-39447, FGF-2 siRNA (r): sc-108055, FGF-2 shRNA Plasmid (h): sc-39446-SH, FGF-2 shRNA Plasmid (m): sc-39447-SH, FGF-2 shRNA Plasmid (r): sc-108055-SH, FGF-2 shRNA (h) Lentiviral Particles: sc-39446-V, FGF-2 shRNA (m) Lentiviral Particles: sc-39447-V and FGF-2 shRNA (r) Lentiviral Particles: sc-108055-V.

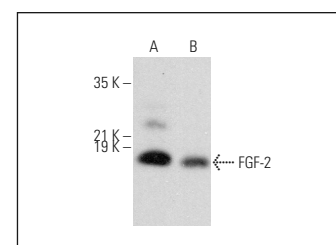
Molecular Weight of FGF-2 isoforms: 18/21/24 kDa.

Positive Controls: Hs68 cell lysate: sc-2230, WI-38 whole cell lysate: sc-364260 or XP12RO whole cell lysate: sc-364364.

## DATA



FGF-2 (A-1): sc-271847. Western blot analysis of FGF-2 expression in Hs68 (A), 3611-RF (B) and mouse LacZ (C) whole cell lysates.



FGF-2 (A-1): sc-271847. Western blot analysis of FGF-2 expression in WI-38 (A) and XP12RO (B) whole cell lysates.

## SELECT PRODUCT CITATIONS

- Sweeny, L., et al. 2012. Evaluation of tyrosine receptor kinases in the interactions of head and neck squamous cell carcinoma cells and fibroblasts. *Oral Oncol.* 48: 1242-1249.
- Lu, W., et al. 2016. The new role of CD163 in the differentiation of bone marrow stromal cells into vascular endothelial-like cells. *Stem Cells Int.* 2016: 2539781.
- Ichikawa, K., et al. 2020. Activated FGF2 signaling pathway in tumor vasculature is essential for acquired resistance to anti-VEGF therapy. *Sci. Rep.* 10: 2939.
- Zhang, Y.F., et al. 2021. Therapeutic effect of a traditional Chinese medicine formulation on experimental choroidal neovascularization in mouse. *Int. J. Ophthalmol.* 14: 1492-1500.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.